517,714

## **Abstract**

An integral machine for polishing, cleaning, rinsing and drying workpieces such as semiconductor wafers. A load/unload station has a plurality of platforms for receiving cassettes of wafers to be processed. A dry end-effector of a robot retrieves wafers from the cassettes and transfers them to an index table. A transfer apparatus having wafer carrier elements picks up wafers from the index table, moves the wafers to a polishing table for polishing, and returns the wafers to the index table for further processing. A flipper moves the polished wafers to a cleaning station. The cleaning station includes scrub stations, a rinsing station and a spin dryer station, and a connective system of water tracks. A wet end-effector of the robot transfers rinsed wafers to the spin dryer station. The dry end-effector of the robot moves dried wafers from the spin dryer station back to the cassette of origination.